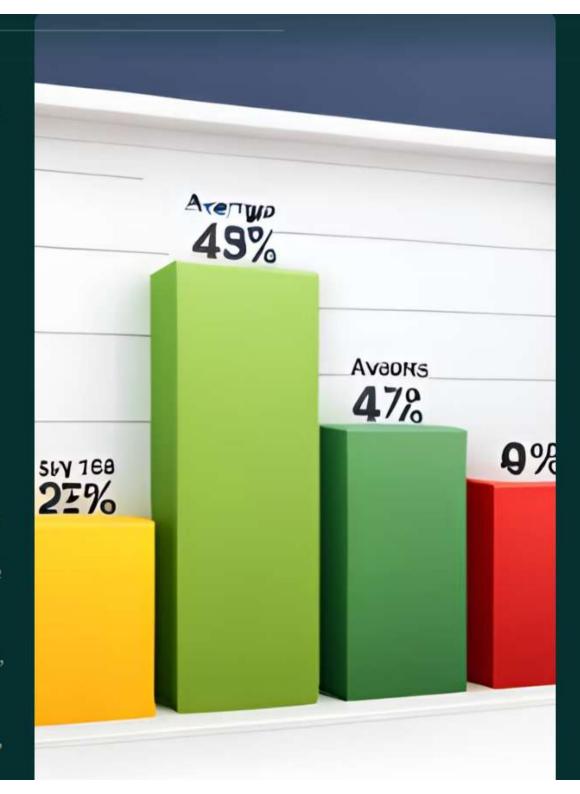
## Ranking Businesses by Loan Amount: A Preliminary Analysis

# Using SQL Functions to Analyze Loan Eligibility: The Provided Query for Average Approval Rate by NAICS Code

The provided SQL query is calculating the average approval rate for different NAICS (North American Industry Classification System) codes in the Ioan\_info table. It filters out NAICS code '0' and groups the results by NAICS code. The query then orders the results in descending order of average approval rate and limits the output to the top 5 NAICS codes.

Based on the results you provided, it seems that all the top 5 NAICS codes have an average approval rate of 1, indicating that loans are approved for all the businesses belonging to these NAICS codes. This information alone does not provide a clear indication of whom to give loans to or not, as all the businesses in these NAICS codes seem to have a 100% approval rate. To make a more informed decision on whom to give loans to and whom to not, you might consider additional factors such as the total number of loan applications received for each NAICS code, the financial stability of the businesses, the purpose of the loan, credit history.



Ranking Businesses by Loan Amount

Here Are Some Observations Based on the Analysis

Need for Additional Analysis

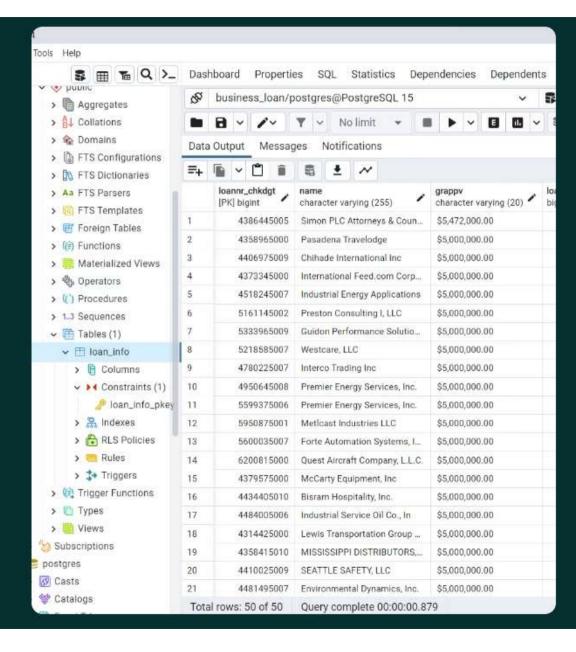
## Ranking Businesses by Loan Amount

Based on the provided analysis, the businesses are ranked based on their loan amount in descending order. The column loan\_rank represents the rank assigned to each business based on the loan amount.



## Here Are Some Observations Based on the Analysis

Simon PLC Attorneys & Counselo has the highest loan amount of \$5,472,000.00 and is ranked at position 1. Other businesses, including Ocean Plaza Beach Resort, SEATTLE SAFETY, LLC, Lewis Transportation Group LLC, and The Sports Basement, Inc., are ranked at position 2 with a loan amount of \$5,000,000.00. This indicates that they have all received loans of the same value.



### **Need for Additional Analysis**

This ranking is based solely on the loan amount without taking other factors, such as financial history, credit score, business plan, revenue, and profitability into consideration. To make a more informed decision, a comprehensive evaluation of all these factors is necessary to assess the risk and determine the suitability of providing a loan.



## Ranking Businesses Based on Job Creation: What to Consider

Ranking Methodology

Here Are Some Observations Based on the Analysis

Considerations for Loan Decisions

## **Ranking Methodology**

Based on the provided analysis, the businesses are ranked based on the number of jobs created in descending order. The column job\_rank represents the rank assigned to each business based on the number of jobs created.

### Here Are Some Observations Based on the Analysis

The top businesses in the ranking, such as "LACKEY & CLARK OIL COMPANY" and "ITO INDUSTRIES, INC.", have all created 8800 jobs and are placed at position 1. This indicates that all businesses in the result set have the same job opportunities. The ranking is based solely on the number of jobs created, without considering other factors.

#### Considerations for Loan Decisions

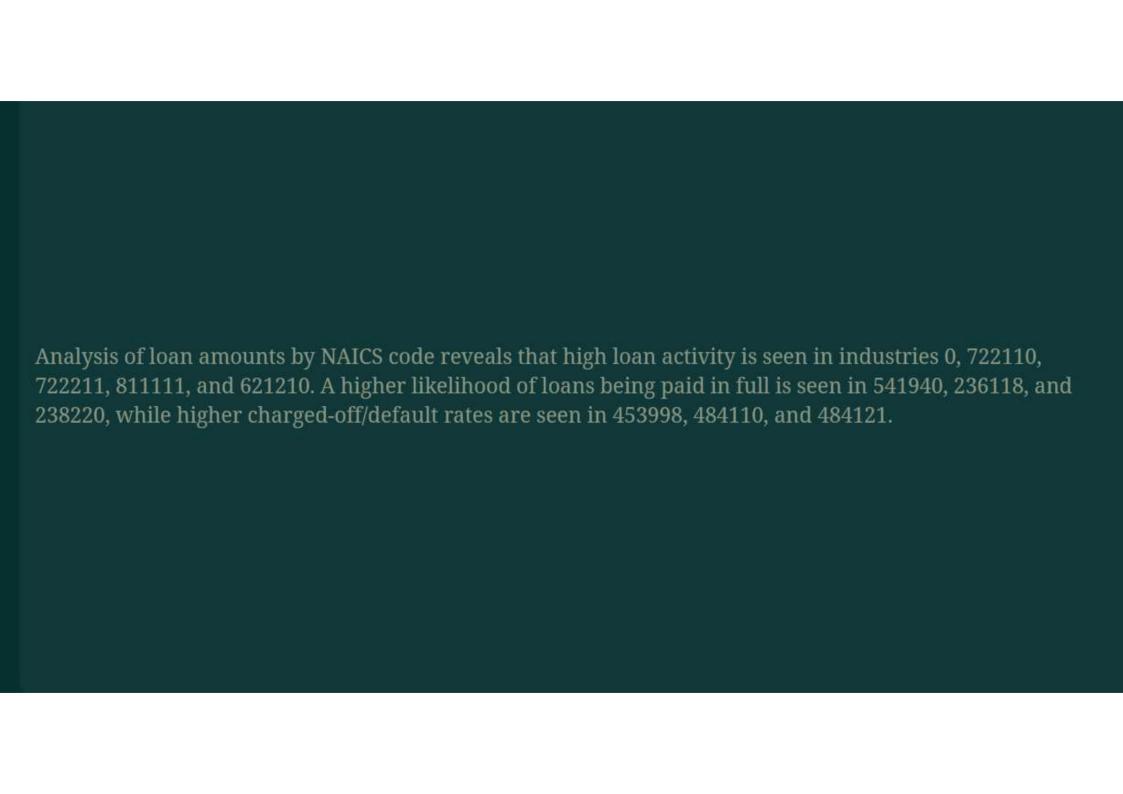
Loan decisions should consider the business's financial health, industry trends, market demand, profitability, and job creation potential. Assessing the ability to sustain created jobs is also important to ensure the loan is given to businesses with strong foundations and growth potential.

## Ranking Methodology

#### **Observations**

Businesses with the lowest loan amounts have a percentile rank of 0. As loan amounts increase, so does the percentile rank. This relative measure of loan amount compared to other businesses in the dataset provides insight into how much each business is borrowing.

## **Summary of Findings**



#### **Mixed Results**

NAICS codes 235310, 238990, 453220, and 236115 have relatively favorable loan repayment and default rates, while codes 722213, 448310, and 812310 have higher default rates and moderate to low repayment rates, indicating a higher risk associated with loans in those industries.

#### Recommendations

When making lending decisions, it's important to consider factors beyond the NAICS code and loan status percentages. Assessing the financial stability of the business, creditworthiness, repayment history, business plans, industry trends, and doing a risk analysis and evaluating collateral (if applicable) can help to make informed decisions. Further validation and risk assessment is required before lending.

## Loan Approval Rates: The Need for a Comprehensive Risk Assessment

### **Loan Approval Rates**

Analysis of loan approval rates by urban/rural status shows a 100% approval rate for both urban and rural areas, with all loans classified as "P I F" and no loans classified as "CHGOFF" or missing status.

Undefined/unknown areas also have a 100% approval rate of "P I F."

# Loan Approval Insights: Understanding the Data and Making Recommendations